Hose and Coupling Purchases by Food Companies

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The \$330 million hose and coupling market within the food industry includes use in a number of processes, many of which require compliance with food and drug regulations for contamination and safety. Hoses and couplings used in food manufacturing processes have a further requirement — maintaining product quality.

Take, for example, an application that involves purifying air prior to exhausting it from stacks. This can involve fabric filters or scrubbers, or both, depending on whether the contaminant(s) is particulate, gas or a combination. Electrostatic precipitators are an alternate means of particulate removal but have limited use in the food industry (an exception would be a food plant with coal fired boilers) and thermal oxidizers, which may combust odorous or harmful gases, are also in limited use. Cyclones are used to separate large particles from the air stream.

All these systems use hoses and couplings; scrubbers must direct wastewater to tanks or clarifiers and dust from hoppers need to be transported. Small hoses and couplings are used in the continuous emissions monitoring systems. The fans and pumps all have coupling requirements, while others require expansion joints.

Plant wastewater includes a series of steps from pre-filtration to final filtration. Many plants are now turning their food waste into biogas, which can then be used for heat or energy — these can include not only the combustor, but also a steam generator. All of these processes use hoses and couplings.

A number of technologies are used to purify liquids in the food industry. Cartridges are used to purify water used in food processing as well as purify juices and other liquids. They are often supplied in a multiple bank with interconnecting piping and couplings. Cross-flow membranes are used to remove small particles from food liquids and water where the solids content is modest; they would be preceded by a macro-filtration device if large amounts of solids need to be removed. Clarifiers and centrifuges are also used to purify liquids with large amounts of solids.

Three hundred international food companies will account for 50 percent of hose and coupling purchases by the industry, which will influence the purchasing decisions made by smaller

companies. Since their purchases are relatively predictable, it is possible to build the primary sales program around accurate forecasts of their "new, replace, and repair" expenditures.

Six of these companies will account for nearly 10 percent of all hose and coupling purchases over the next five years — so, while the industry will be spending \$330 million per year, the top six purchasers will account for over \$30 million of that total.

Six most influential food companies:

Anheuser-Busch InBev is based in Belgium and is the world's largest brewer and sixth largest purchaser of hose and coupling products.

Nestlé is the world's largest food and beverage company and largest purchaser of hoses and couplings. It has more than 2000 brands and is present in 189 countries around the world. Nestle is expected to spend \$6.7 million for hoses and couplings in 2019. This includes hoses and couplings for automatic back wash filters, which are needed for chocolate macro-filtration.

Coca-Cola and PepsiCo purify large quantities of water for their food and beverage products.

JBS S.A., a Brazilian company, is the largest (by sales) meat processing company in the world, producing factory processed beef, chicken and pork, and also selling by-products from the processing of these meats. The processes require both air and liquid filtration. For example, liquid filtration is used to purify blood products, which are then spray dried and captured in fabric filters. Wastewater treatment of facilities used to grow animals requires substantial hose and coupling expenditures.

The Kraft Heinz Company is the third-largest food and beverage company in North America and the fifth-largest food and beverage company in the world. Cheese manufacturing requires significant investments in centrifuges and cross-flow filtration and the accompanying hose and couplings.

Tyson Foods has expanded from chicken to a number of food products. Filtration is needed throughout the cycle from poultry feed to food processing.

Hose and Coupling Average Purchases per Year for 2018-22 - \$ millions								
Company	Total	Anheuser Busch	JBS	Nestle	PepsiCo	Coca- Cola	Kraft Heinz	Tyson Foods
Hose and Coupling Purchases	330	3.60	5.50	6.70	5.21	3.66	3.63	3.44



MARKET REPORT



Wine-makers will spend \$30 million for hoses and couplings next year — just under 10 percent of the expenditures by the food and beverage industry in total.

The U.S. and France account for 25 percent of the world's wine consumption. Italy, Germany and China account for another 25 percent. The top 20 countries consume most of the wine.

The top 10 wine makers will spend \$3.8 million for hoses and couplings next year.

Company	2019 Hose and Coupling Purchases - \$1000			
E.J Gallo	800			
Constellation Brands	500			
The Wine Group	450			
Treasury Wine Estate	350			
Viña Concha y Toro	300			
Castel Frères	300			
Accolade Wines	300			
Pernod Ricard	300			
Grupo Peñaflor	250			
FeCoVitA Coop	200			

Many food companies are embracing the Industrial Internet of Things (IIoT). Remote monitoring of hose and coupling performance in all their plants allows them to centralize purchasing and make decisions based on lowest total cost of ownership. As a result, a few people at each one of the 300 largest food companies will make 50 percent of hose and coupling purchasing decisions. This creates a unique opportunity for direct sales by hose and coupling suppliers.

The first step is the determination of the future purchases by each large prospect. The top 100 companies have individual purchases of hoses and couplings exceeding \$100,000/year and should be pursued directly. The filtration system suppliers are another major purchasing group. Some of these companies, such as Danaher-Pall, Alfa Laval and Andritz, are major hose and coupling purchasers. There are large valve and pump companies with substantial sales in the food industry, which should also be targeted.